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CAUSATION—IN CONTEXT: AN AFTERWORD

RICHARD A. EPSTEIN*

The four principal papers in this symposium illustrate the rich diversity of approaches that may be taken toward the question of causation—long and rightly regarded as one of the central issues in the law. In this afterword, I shall address myself to some of the recurrent questions of causation that intrude themselves into the legal, economic and philosophical account of the subject. The purpose of this paper is to give some indication of the proper place that causation has in a comprehensive theory of tort law, indeed of civil obligation. The task, then, is to place causation back into the context from which it is all too often wrenched.

In order to do that it is necessary to recanvass, in some degree, the major issues of tort law. Accordingly, the first section addresses the question of whether it is possible to have a baseline of property rights which distinguishes violence from competition, and thus allows the emergence of a theory of tort liability that depends heavily on causal concepts. The next section addresses the extent to which a theory of tort liability should be predicated upon negligence or strict liability. The third section addresses the question of whether causation is a nonreciprocal concept, which vitiates its use in tort theory. The fourth section deals with remoteness of damage issues. The fifth section then deals with some recurrent joint causation issues, including those involving the extrasensitive plaintiff. Finally, the sixth section addresses the relationship between causation, contract and regulation, and thus uses the analysis as a window onto some larger questions of political theory. In the course of this paper, I have used the occasion to clarify some of my own views on the subject, views which have evolved constantly over the fifteen years since I wrote "A Theory of Strict Liability."¹

I. BASELINE PROBLEMS

One recurrent theme raised in these and other papers concerns the identification of a baseline against which causal determinations should be measured. At its simplest, the baseline problem arises because of a latent imprecision in the idea that it is wrong, morally or legally, simply "to

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1. Epstein, *A Theory of Strict Liability*, 2 J. LEGAL STUD. 151 (1973).

cause harm" to another individual. As stated the proposition is very broad indeed and, unless qualified, covers any cases where A's actions leave B worse off. If the principles of causation created responsibility in every case of private loss, then the legal system would break down because of the vast scope of potential liability its rules have created. We could try to confine liability by invoking some excuses or justifications, for some there must be. But these would have to be so extensive that causation would recede quickly into the background, as a preliminary step in an analysis that, rightly understood, turned ultimately on other considerations. The realists who thought that "policy considerations" dominated all apparent causal judgments could relish their belated vindication.²

The only way to escape a policy-based theory of causation (and through it tort law generally) is to limit the cases of harms caused to those that damage the *rights* of the plaintiff, typically rights in his person or property. In the end I believe that this is the correct strategy, but embracing it clearly suggests that causal inquiries take second place in the chain of responsibility, behind the determination of initial entitlements to property or person. To use Aristotle's old terms, the question of *corrective* justice (which examines the matter of redress for harm caused) presupposes that there is some prior resolution of the question of *distributive* justice (which examines the underlying rights).³ The hard question that Aristotle posits, then, is where do these rights come from in the original legal position.

The usual common law account of rights was both naive and correct. Each person was said to have rights of autonomy in his own person; and persons were said to have rights in their property, whether acquired by first possession or by grant; and in its most difficult application, each person was said to have the right to enter into advantageous relations with third parties. For each entitlement the question is, what kinds of conduct count as "interference" with these rights, which are (*prima facie*) actionable. The central common law line was that "interference" (sometimes called "actionable interference") had to involve the use of force or fraud. At one level it is quite clear that these limitations answer at least one of the concerns raised above. The notions of causation associated with force and fraud are far less broad than those that

2. See, e.g., Malone, *Ruminations on Cause-in-Fact*, 9 STAN. L. REV. 60 (1956).

3. "Of particular justice and that which is just in the corresponding sense, (A) one kind is that which is manifested in distributions of honour or money or the other things that fall to be divided among those who have a share in the constitution . . . and (B) one is that which plays a rectifying part in transactions between man and man." ARISTOTLE, NICOMACHEAN ETHICS Bk. V para. 2.

simply fasten upon the existence of some kind, any kind, of externality brought on by the act or omission of one person to another. One can shrug politely when analysts such as Kelman attribute causal status to the "existence" of the plaintiff.⁴ The system of force and fraud meets the charge that principles of causation lead to endless administrative rangles in individual cases, or imposes intolerable demands upon the set of justification or excuses used to defeat the assertion that causation of harm always entails responsibility.

The question is whether it is possible to give some reason why this subset of causes generally is relevant to legal and moral inquiry. This question in turn depends on whether it is possible to distinguish between force and fraud on the one hand, and other forms of loss, most notably competitive injury, on the other.⁵ I believe that the distinction is central to understanding the legal system, but its rationale becomes intelligible only if one is prepared to switch to overtly consequentialist (and utilitarian) arguments about the original distribution of rights.⁶ The basic point here is to compare the social consequences of a world which permits the unlimited use of force and fraud, with one which prohibits both these forms of conduct, but allows unlimited competitive activities, even though they necessarily cause harm to rivals. The differences are very marked.

Consider first the legal positions of the immediate parties to a suit, A and B. Where violence is at stake, the prospects are somber. If A can use force, so can B, and there is the enormous expenditure of resources to secure or resist the transfers of wealth that the use, and threat, of force are designed to bring about.⁷ As between the two parties there is strictly a negative sum game. Introduce third parties and the situation is scarcely any better. The constant use of force and fraud requires everyone to be diligent in the protection of what few resources he has at his command. Protection dominates production, and the Hobbesian nightmare becomes the world in which we live. Clearly there seems to be some social gain in having rules that restrict the use of force. To be sure, the blanket prohibition may not be perfect: there could well be need for

4. Kelman, *The Necessary Myth of Objective Causation Judgments in Liberal Political Theory*, 63 CHI.-KENT L. REV. 579 (1987) (Professor Kelman's article appears in this symposium issue.).

5. The issue also has a critical constitutional component. See Epstein, *Self-Interest and the Constitution*, 37 J. LEGAL EDUC. 153 (1987).

6. For a discussion of the connection, see Epstein, *A Last Word on Eminent Domain*, 41 U. MIAMI L. REV. 256-58 (1986), and my observations in Epstein, *Proceedings of the Conference on Takings of Property and the Constitution*, 41 U. MIAMI L. REV. 49, 107-14, 125-27 (1986).

7. The argument dates from Tullock, *The Welfare Costs of Tariffs, Monopolies and Theft*, 5 W. ECON. J. 224 (1967).

refinement, as the social ideal might not (indeed does not) conform to a universal prohibition against the use of force and fraud. Yet the office of excuses and justifications is precisely that they allow for corrections (e.g. consent and self-defense) of the basic premise, without throwing out the good common sense behind the proposition that controlling force and fraud is the first step in creating a desirable social environment. It is for just that incremental inquiry that the common law system of pleading, with its potentially endless alternation of pleas, is so well adapted.⁸

Competition has very different welfare consequences. If each person (protected from force and fraud) is allowed to offer his goods and services for sale at whatever price he sees fit, the gains of sellers and consumers will surely be increased, even if competitors necessarily suffer some losses. And the competitors still can defend themselves by reducing the price of their goods to meet the threat of a rival offer. The need for assault and resistance is replaced by a different kind of cut and thrust, now in a world with cost reduction and product innovation. The disadvantaged competitor in the one case is the successful consumer or seller in the next. So long as we keep favoritism from the system (proposals to ban my competitors only), the basic welfare consequences of competition are dramatically different, and better, than those of force and fraud. Yet here too the refusal to recognize liability for pure economic harm need not be frozen into an absolute. It might be possible, although surely costly, to place limitations upon anticompetitive horizontal arrangements on the ground that any movement from the competitive to the monopoly situation involves net social losses, and not simply a transfer of wealth from consumers (some of whom will no longer purchase goods) to the monopolist. These losses are hard to quantify, and it may well be that free entry is a better protection against monopoly than any set of public restrictions that the state could devise. In any event, the exact elaboration of these points is something of a detail; the critical point is that there is some reason to answer Aristotle's original question of distributive justice in ways that recognize property rights to be secure against force and fraud, but not against ordinary competition.

The baseline objection that is raised against the libertarian view of tort liability can thus be solved by a utilitarian account of the nature of property rights. This solution in turn helps shape the responses that should be given to many of the standard issues in tort law, including those which go to both the basis of liability and the working out of the

8. See Epstein, *Pleadings and Presumptions*, 40 U. CHI. L. REV. 556 (1973).

precise nature of the causal connection and its place in the legal hierarchy.

II. BASIS OF LIABILITY: NEGLIGENCE AND STRICT LIABILITY

One of the most debated topics in the law of tort is surely the choice of either a negligence or a strict liability rule for accidental harms. Even if we assume that protection extends to the use of force and fraud, the issue remains whether this protection covers all instances of harm, or only some subset of them. When looked at from the perspective of the decided cases, it is quite clear that the choice of liability rule looms very large. For example, many of the difficult cases that work their way, first to trial, and then to appeal, are those with outcomes that may well turn on the choice of either a negligence or a strict liability rule.⁹ Viewed from a more distant perspective, the choice between these liability rules looms less large, if only because of the many ways in which the two theories of liability can in practice be made to converge one to another.¹⁰ The theory of strict liability can be softened to exclude from recovery those cases in which the defendant hurts the plaintiff when the plaintiff is under imminent danger to his person or property. In a similar fashion, the theory of negligence can be tightened by placing the burden of proof upon the defendant, or by allowing the plaintiff to find some "antecedent negligence" which converts some otherwise innocent act into tortious liability. The hardy and practical among us, therefore, might decide not to worry about the dispute at all since so much more turns on whether we displace the ordinary tort system for physical harms with a system of government regulation. But the more intellectually insistent among us would, most assuredly, demand some form of theoretical unity, which it is hoped would provide a knock-down argument that cuts the case one way or the other.

When I wrote *A Theory of Strict Liability* in 1973,¹¹ I thought I had just such a clinching, logical argument which cut in favor of the use of a general rule of strict liability in all "stranger" cases. Today I am quite convinced that I did not. One way in which I stated the position was in

9. See, e.g., *Brown v. Kendall*, 60 Mass. (6 Cush.) 292 (1850); *Rylands v. Fletcher*, 3 H.L. 330 (1868); *Bolton v. Stone*, 1951 App. Cas. 850.

10. See Epstein, *The Social Consequences of Common Law Rules*, 95 HARV. L. REV. 1717 (1982). For other discussion of the convergence between apparently different legal regimes, see Kroll, *Breach of Contract in the Soviet Economy*, 16 J. LEGAL STUD. 119 (1987) (comparative analysis of frustration and impossibility in Western and Soviet systems); Levmore, *Variety and Uniformity in the Treatment of the Good-Faith Purchaser*, 16 J. LEGAL STUD. 43 (1987) (discussing the issue with respect to conflicts between owners and good-faith buyers).

11. Epstein, *supra* note 1, at 151.

connection with *Vincent v. Lake Erie Transportation Co.*,¹² a case which, narrowly stated, addressed the issue of whether the defense of private necessity was so complete that it deprived the innocent plaintiff of any right to damages, or whether it was at best a conditional privilege that allowed the defendant to take or to destroy the plaintiff's property—provided that he made good in damages the loss for the harm so inflicted. Thus I wrote:

Had the Lake Erie Transportation Company owned both the dock and the ship, there could have been no lawsuit as a result of the incident. The Transportation Company, now the sole party involved, would, when faced with the storm, apply some form of cost-benefit analysis in order to decide whether to sacrifice its ship or its dock to the elements. Regardless of the choice made, it would bear the consequences and would have no recourse against anyone else. There is no reason why the company as a defendant in a lawsuit should be able to shift the loss in question because the dock belonged to someone else. The action in tort in effect enables the injured party to require the defendant to treat the loss he has inflicted on another as though it were his own. If the Transportation Company must bear all the costs in those cases in which it damages its own property, then it should bear those costs when it damages the property of another. The necessity may justify the decision to cause the damage, but it cannot justify a refusal to make compensation for the damage so caused.¹³

In essence, then, the argument for strict liability in cases like *Vincent* worked "on the assumption that the defendant must bear the costs of those injuries that he inflicts upon others as though they were injuries that he suffered himself."¹⁴

Professor Weinrib, in his stimulating paper *Causation and Wrongdoing*,¹⁵ takes me to task both for the procedure that I have adopted and for the substantive results that I claim it yields. As an avowed "non-instrumentalist," his view is that nothing is gained by treating two persons together as some single "superperson" when the very theory of individual rights and personal liberty and autonomy (to which my paper on *A Theory of Strict Liability* made an extensive and overt appeal)¹⁶ necessarily emphasizes the *differences* between the persons and not their amalgamation.¹⁷

Substantively Weinrib then argues that my procedure does not gen-

12. 109 Minn. 456, 124 N.W. 221 (1910).

13. Epstein, *supra* note 1, at 158.

14. *Id.* at 159.

15. Weinrib, *Causation and Wrongdoing*, 63 CHI.-KENT L. REV. 407 (1987) (Professor Weinrib's article appears in this symposium issue.).

16. Epstein, *supra* note 1, at 203-04.

17. Weinrib, *supra* note 15, at 421-22.

erate any unique set of substantive results. On the one hand, he observes that the “single owner” procedure might generate a rule which fastens upon defendants liability for harms caused by their bodies, even under circumstances in which they do not act—as by sleepwalking and epilepsy. So too, Weinrib insists that the procedure could lead to a rule resulting in a more restricted form of liability:

One can equally argue, however, that because the plaintiff would have no cause of action if he were identical with the defendant, so no cause of action should be available when their individual identities are restored. Epstein assumes that the relevant feature of his hypothetical is that the superperson suffers an irrecoverable *loss* that should remain the actor’s loss in the two-party situation. But the significant feature may be the superperson’s *irrecoverable* loss, that should remain irrecoverable when transposed into the actuality of litigation. This reading allows no liability for any losses.

... Epstein tries to get a handle on this problem by collapsing the two parties and making some feature of the counterfactual situation determinative. This procedure merely submerges the problem without resolving it. As long as the plaintiff and the defendant are amalgamated, it does not matter whose interests are favored because their interests are not separate. When the parties are restored to their discrete existences, however, the original tension reasserts itself, this time in the selection of the counterfactual feature that is significant in the transition back to the real world.¹⁸

The second part of Weinrib’s attack criticizes the way in which I link the ideas of property to those of tortious liability. As he notes, I had written with respect to liability rules and property rights that:

Ownership is a social concept. A system of private property contains a necessary commitment to the web of rights and duties between the owner and the world. The basic rules of ownership state in general form the types of actions by others that constitute wrongs. The basic rules of liability invoked in tort cases concentrate upon the particular party whose conduct has singled him out and thus necessitated some vindication of original ownership rights. The two are opposite sides of the same coin, with no radical separation between them.

... [I]f you deny the plaintiff the prima facie right to recover against a stranger without proof of negligence, then you have taken a limited property interest; if you deny the plaintiff the right to recover for certain nuisances, then you have created an easement to cause a nuisance. If you allow one man to prevent his neighbor from building on his own land, you have created a restrictive covenant. Allow flooding, and there is a flowage easement. By definition, every liability rule is tied to a correlative property interest that the law protects; to alter the one is necessarily to change the other. The linkage is *not* empirical,

18. *Id.* at 422 (emphasis in original).

it is analytical, a function of the way in which we do use, and must use, all legal language.¹⁹

In response, Weinrib argues that the necessary connection between property rights and liability rules does not direct us to a strict liability system, let alone compel its adoption, for it is possible for one to think of a set of negligence rules which have a correlative set of property rights which leave the owner of a broken vase the ownership of the pieces, but without a cause of action against any person who nonnegligently damaged it.²⁰ In effect, therefore, Weinrib has argued that there is no formal, analytical way to establish the dominance of strict liability over negligence.

In very large measure I agree with his methodological critique, but not with (as I shall discuss momentarily) his own strong substantive predilection that there is some necessary, formal, and abstract commitment that drives us to a negligence rule. In order, however, to make clear my own view of the subject, it is necessary to indicate how I think that the sole ownership argument that I made about *Vincent* can be modified and resurrected to meet Weinrib's formal objections.

Initially, I should note that today there is a strong bias in favor of single ownership methods of explanation in dealing with the choice of legal rules,²¹ notwithstanding the formal objection that Weinrib raises against the procedure. The argument for these comes not out of formal logic, but from the tradition of law and economics. In essence the strength of the argument is that the single owner never faces any kind of externalities and, therefore, will act in order to find that rule which maximizes the value of the whole; so much of which is a consequence of what the Coase theorem says about how people behave in a world of zero transaction costs. The second step in the argument is, however, one that Weinrib does not address. Once it is clear that we *do* live in a world with positive transaction costs, so that many separate people often cannot contract with each other, then the issue is what kind of liability rule will lead us to a result so that all parties will act at all relevant times just as though they were single owners. In stating this question, the first step in the

19. R. EPSTEIN, *TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN* 96-98 (1985) (emphasis in original). See Weinrib, *supra* note 15, at 423, where he quotes only portions of the above passage.

20. Weinrib, *supra* note 15, at 423-24.

21. See, e.g., Bebchuk, *Toward Undistorted Choice and Equal Treatment in Corporate Takeovers*, 98 HARV. L. REV. 1695 (1985); Bebchuk, *The Sole Owner Standard for Takeover Policy*, 17 J. LEGAL STUD. (1988) (forthcoming); Sterk, *Neighbors in American Land Law*, 87 COLUM. L. REV. 55 (1987). I use a similar form of argument in R. EPSTEIN, *supra* note 19, at ch. 14 in dealing with the disproportionate impact test of the eminent domain law, which functionally seeks to make each legislator or citizen act as though he were the sole owner of the property regulated or taken.

analysis, sensibly enough, looks to the incentive effects to inflict harm on others that follow from the choice of given rules. Where the question is liability for harm to another, it is difficult to conceive of a system of liability that tolerates the deliberate infliction of harm upon strangers because of the reason noted above, namely, the return to the Hobbesian war of all against all.²²

Nonetheless, when we do put the class of deliberate wrongs to one side, the extension of tort law to accidental harms becomes more vexed. This is because, as a first approximation, the incentive effects of *both* the strict liability rule and the negligence rule—in the situation of private necessity or not—are essentially identical.²³ In both cases if the system works well, that is, if the ability to measure the levels of care are high, if the solvency of defendants is great, if the levels of damages are easily obtained, then there is really not much to choose from. Indeed in the limit where there is perfection in judicial and administrative technique, then there should be indifference in outcome. Persons who stand behind the veil of ignorance are essentially as well off *ex ante* with the one rule as they are with the other—which is precisely why the disinterested choice between strict liability and negligence traditionally has been so hard to make.

Matters in the world, however, are far from perfect, and hence it is wise to use a definition of social welfare that takes into account the imperfections in the system of fact determination and enforcement. We should act in the abstract as though we have perfect knowledge today of all the imperfections that we shall have to face tomorrow.²⁴ Our future is cloudy because there are difficulties in bargaining, gathering evidence and evaluating that evidence. The choice of legal rule should be responsive to these difficulties. More to the point it is most doubtful that strict liability and negligence rules score equally well on all these points. If it is very difficult to decide collectively what the right standard of care is, or whether the defendant conformed to it, then why not shift to a liability rule which renders that question irrelevant? Thus, the powerful movement toward strict liability in the nuisance and the trespass cases and

22. See *supra* p. 655.

23. See Brown, *Toward an Economic Theory of Liability*, 2 J. LEGAL STUD. 323 (1973). For discussion of my views, see Epstein, *The Temporal Dimension in Tort Law*, 53 U. CHI. L. REV. 1175, 1177-81 (1986).

24. See Margolis, *Two Definitions of Efficiency in Law and Economics*, 16 J. LEGAL STUD. 471 (1987). His second definition is pertinent here: "An efficient legal system is one in which property rights are assigned and liability rules are formulated so that the value of the things present in society, as measured by willingness to pay, is maximized over all alternative legal environments, given the costs of transacting." *Id.* at 473-74. The last clause is the key.

*Rylands v. Fletcher*²⁵ was justified in part by those whose preference was generally for a negligence standard.

By this standard, moreover, the rule of conditional privilege in private necessity cases looks far better than it did when considered solely as a lifeless abstraction. Thus, one alternative is to allow the property owner to exclude the boat owner altogether. But the general sense is that this is very costly, indeed, for while docks can be repaired, when people drown only their bodies can be recovered. Who wants, therefore, a rule which encourages an awkward bargaining situation in the midst of a raging storm? One alternative would be simply to allow the party who acts under necessity to take or enter property for self-preservation. Now the utter absence of any damage remedy could well induce him to be careless in the way he behaves in responding to the sudden necessity, and may induce lower levels of precaution before any such necessity occurs. Behind the veil of ignorance the party who does not know whether he will be dock owner or boat owner will prefer the rule that disciplines the boat owner precisely because he is the party who acts, and thus has (as a first approximation) greater control over the total level of the loss. The control that goes with action, thus, is one way to break the conceptual tie that Weinrib sees between victim and actor. Of course, the law could still make liability for damage to the dock turn on the boat owner's negligence, but the cost of supervising the conduct of the boat owner when the dock owner is not present are difficult indeed. The intermediate rule of incomplete privilege seems therefore to do pretty well under the single ownership test, as long as that test is taken, not as a social abstraction, but as a way to get a handle on what people would want for liability rules once they are no longer superpersons, but individuals for whom high transaction costs frustrate any consensual solution.

Weinrib of course is not an instrumentalist, and finds the combined effect of these small practical considerations unequal to the great task which legal theory places before him. Yet being unable to point to the way in which legal rules respond to high transaction costs and imperfect information, he is forced, in defending negligence, to resort to a very forced and formal argument, one of the kind he has rightly rebuked me for having made in *A Theory of Strict Liability*.²⁶ Not content with

25. Thus, speaking of strict liability under *Rylands v. Fletcher*, 3 H.L. 330 (1868), Frederick Pollock wrote: "But the ground on which a rule of strict obligation has been maintained and consolidated by modern authorities is the magnitude of the danger, coupled with the difficulty of proving negligence as the specific cause, in the particular event of the danger having ripened into actual harm." F. POLLOCK, *THE LAW OF TORTS* 393 (1st ed. 1887).

26. See Epstein, *supra* note 1, at 151.

showing that there is no formal, knock-down argument for strict liability, he proceeds to insist that there is just such an argument for the negligence system because of an equality that is both

a formal and abstract one: all property holders are as property holders equal to each other. Although tautological, this conclusion nonetheless yields the important conceptual consequence that the liability regime correlative to the idea of property will regulate the relationship of doer and sufferer according to a correlatively abstract equality.²⁷

Having set out the abstract principle, Weinrib then shows that the toleration of unrestrained intentional harms is simply incompatible with the idea of property because it means that every person can claim the things possessed by another as his own. At this level his analysis does not depart from the position that I advanced above,²⁸ that the casual acceptance of violence invites the reemergence of the Hobbesian war of all against all. Weinrib has not shown, however, why it is that we must have personal liberty and property rights in the first place. He has only shown that *if* we do have these conceptions, *then* we cannot tolerate the unrestrained violence. In order to make out the necessary premise, he must revert to the kind of consequentialist argument that seems pretty easy to make on the facts—that peace is better than war—but which his own methodology forbids him from making.

Be this as it may, once past the easy case of intentional harms, Weinrib tries to argue that “property as an idea *excludes* strict liability and requires a negligence regime.”²⁹ But his insistence upon formal conceptions of equality falls far short of this result. One obvious rejoinder is that today we do, and historically have had, both the regime of private property and strict liability. Such has been the position with respect to torts of trespass to land, nuisance, conversion, *Rylands v. Fletcher* liability, animals and the like. Whether one judges these outcomes as successful or cumbersome is quite beside the point in our present conceptual frame of mind. If systems of strict liability were logically inconsistent with the notion of property, then they should simply explode: we should not be able to observe them at all.

The argument against Weinrib’s position, however, cuts deeper still. There is nothing inherent in a system of strict liability that offends the principle of formal equality, any more than there is something inherent in a principle of negligence that offends this same principle. In both cases it is quite possible to state general and formally neutral rules to

27. Weinrib, *supra* note 15, at 426.

28. See *supra* pp. 655, 660-61.

29. Weinrib, *supra* note 15, at 425 (emphasis in original).

govern the situation. We cannot make this issue into one of the rule of law.³⁰ The strict liability rule says, roughly, that "every person shall answer for the harm caused to the person or property of his neighbor, unless justified or excused, even if he has exercised all possible care." The negligence rule says the same thing, with a change in the last clause, to wit, that "every person shall answer for the harm caused to the person or property of his neighbor, unless justified or excused, provided that he has not taken reasonable care to prevent such harm." That negligence "regulates the relationship between the property owners on the basis of equality," or is said to require—which, by the way, logically it need not—an "objective comparison of the risk of harm and cost of prevention" does nothing to distinguish it from a theory of strict liability, which may also be applied generally to all persons and to all property.

Weinrib thus fails in his demonstration of the logical necessity of the negligence system for reasons that are quite similar to those which undermined my earlier efforts in *A Theory of Strict Liability*.³¹ He has tried to use a very limited palate of abstract and formal ideas in order to avoid the *substantive* arguments that have to go into the intelligent selection of any liability rule. To put the point more starkly, suppose we were to be able to demonstrate the formal necessity for a system of negligence, and, at the same time, could show that everyone was better off, *ex ante*, under a system of strict liability. Is there any reason why we should put the abstract definitions of personal equality ahead of an alternative system that does more to satisfy the human needs and wants of *all* persons? The choice between strict liability and negligence has been so vexed for so long because the convergences between the two systems are as important as their differences. Given that closeness we should not expect that any *formal* argument will be sufficient to establish the necessary preeminence of one over the other. Weinrib tries to make just such an argument—and he fails.

III. NONRECIPROCAL CAUSATION

The first two stages in formulating a comprehensive system of tort liability involve, then, the recognition of a system of property rights and

30. For my views on the subject, see Epstein, *Beyond the Rule of Law: Civic Virtue and Constitutional Structure*, GEO. WASH. L. REV. (1987) (forthcoming), which argues among other points that "the rule of law" as a formal constraint is only a necessary condition for sensible legal rules, but hardly a sufficient one. By weeding out regimes of individual arbitrary power, the rule is a barrier to many forms of tyranny, but it of itself it hardly determines the relative merits of many legal rules, all of which are formal and generalizable. The classic formulation of the rule of law is found in A.V. DICEY, INTRODUCTION TO THE STUDY OF THE LAW OF THE CONSTITUTION (7th ed. 1908).

31. Epstein, *supra* note 1, at 151.

the choice of a liability rule. The full demands of the system are, however, not yet satisfied, for it is also necessary to show how the general principles of causation fit into the overall analysis. Thus, with the baseline of property rights secure, it becomes possible to give a more complete answer to those who believe that the reciprocal nature of causation makes it impossible to develop any coherent system of tort liability. These concerns are especially evident in Thomson's paper, the second part of which is devoted to an extensive analysis of my views on the question of whether it is possible to maintain the distinction between causing harm on the one hand, and not conferring a benefit on the other. In my book, *Takings*,³² I argued that this distinction was essential to forming any clear working understanding of the police power, and that it had been obscured in a number of scholarly writings, including Frank Michelman's classic paper, *Property, Utility and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*.³³ In his paper, Kelman pursues the same line, and argues quite explicitly that the Coasean insights on the reciprocal nature of causation destroy the libertarian baseline,³⁴ and thus, constitute a devastating blow to theories of tortious responsibility of the sort that I have championed. The stakes are clearly high, for if these criticisms are correct, then both the classical theory of tort liability and eminent domain *do* become largely incomprehensible, for it is no longer possible to determine when activities can be restricted by fiat, and when the restriction can be imposed only if compensation is paid. Yet this sword has two edges. If my argument about the distinction between force and competition, is correct, then the entire classical structure stands.

Happily, the distinction does not collapse. The difficulty with the Coasean vision follows from what has been said above. Coase's argument takes it for granted that the question of what counts as a property right has to be determined in the same breath (and at the same time) that one answers the question of whether A has caused harm to B, or B has caused harm to A. Within the Coasean model, the implicit assumption was that all determinations of legal right had to be determined case by case: was it cheaper for (this) farmer to protect these crops than it was for (this) rancher to restrain these cows. Was it easier for the victim (if we can use that old causal artifact) to duck the bullet than for the gunman not to shoot. But in these and similar cases certain categorical lines

32. R. EPSTEIN, *supra* note 19, at 115-21.

33. Michelman, *Property, Utility and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law*, 80 HARV. L. REV. 1165 (1967).

34. See Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

can establish rights on a wholesale basis. The principle of autonomy says, "do not invade another's person," and thus we do not have to examine each shooting to see whether the bullet struck the face, or the face got in the way of the bullet. We can say in a nontrivial and instructive way that one person shot the other. In the cattle case, we have boundary lines that were well established and well understood before the individual case. We can say, therefore, that the cattle trespassed, and not that the crops got in the way of the cattle's hooves.

The great advantage of categorical rules about property rights should appeal to Coase: first, they reduce the transaction costs necessary to resolve disputes from harmful interactions, and second, they set the framework of property rights that make subsequent voluntary transactions possible. The cattle rancher can buy out the farmer if he wants to graze his cattle on the farmer's land. Conversely, to set the property rights the other way, that is, in the cattleman, introduces an important asymmetry that frustrates any such voluntary transaction. There are typically many such ranchers and the farmer must buy back the rights to his land from each of them, and even then he cannot be secure against new entrants that may graze on his land.³⁵ Yet where the farmer owns the land, new entrants cannot upset the situation: there need only be a single transaction with the rancher who most wants to graze his cattle. The Coasean world of high transaction costs (the only world that matters) therefore tends to dictate the structure of legal entitlements exactly as the common law had it. The reason that laymen always react to the Coase theorem with such pained incredulity is that they have already (intuitively) figured out, and understood, the baseline of traditional common law property rights that the world of high transaction costs has made necessary. It is no accident that many of the most eager exponents of the Coasean parable ascribe to it because of the implicit boost that it gives to expansive government powers.³⁶

IV. REMOTENESS OF DAMAGE

It is now possible to explain the connection between the property baseline and the usual questions of proximate causation. As noted above, the boundary conditions in property cases are quite clear and invariant from case to case. It is therefore not surprising that these conditions receive little attention in cattle trespass or nuisance cases. The baseline

35. See Vogel, *The Coase Theorem and California Animal Trespass Law*, 16 J. LEGAL STUD. 149, 176 (1987).

36. In addition to Kelman, see Sax, *Takings and the Police Power*, 74 YALE L.J. 36 (1964); Sax, *Takings. Private Property and Public Rights*, 81 YALE L.J. 149 (1971).

question has already been settled, once and for all. What requires at least some attention therefore is the remoteness of damage question: does the sequence of events from the defendant's act to the plaintiff's harm involve the use of force? On this question there is room for infinite factual variation, for the issue of what counts as the use of force does not end with shooting and hitting. There are also the indirect cases of liability which have to be covered including those that involve the threat of force, the use of compulsion and the creation of dangerous conditions. It is necessary as well to find some line beyond which the causal inquiry will not proceed at all.³⁷ These fact-specific disputes inspire endless variation, which explains why the question of remoteness of damage—while less important than the initial determination of property rights—has received far more extensive discussions in the decided cases. The judges are not in the habit of speculating about the types of questions that can bring their system down. Yet trying to put the line between remote and actionable damages in just the right place can inspire endless philosophical fascination on difficult and isolated cases whose importance is practical, not conceptual.

This is evident in the remoteness of damage question implicit in Thomson's BRICK example.³⁸ When A throws a brick at B and hits C, only to bounce off C and hit B in the face, is A, or C, or both, the cause of B's harm? Who's responsible? Here it is taken for granted that B owns his face. So the only issue involves the chain of causation. On that question, if the emphasis is placed upon the use of force, then C normally drops out of the picture because he was the human wall off which the brick bounced, assuming that the laws of physics allow bricks to bounce, and not to fall harmlessly to the ground. In any event, Thomson's hypothetical is little different from the classical common law situation in which liability is imposed for trespass, i.e. the direct use of force, when the defendant is held responsible for "a stone thrown or an arrow glancing against a tree; because there the original motion, the *vis impressa*, is continued, though diverted."³⁹ Even if C's face is not wholly stationary, the case is at best one of joint causation (to be discussed presently) where two forces join work together—though with different inputs—on a single object to cause harm to the plaintiff.

A similar analysis applies to a tricky case discussed by Coase. In

37. See Epstein, *supra* note 1, at 151; Epstein, *Causation and Corrective Justice: A Reply to Two Critics*, 8 J. LEGAL STUD. 477 (1979).

38. Thomson, *Causality and Rights: Some Preliminaries*, 63 CHI.-KENT L. REV. 471, 471 (1987) (Professor Thomson's article appears in this symposium issue.).

39. *Scott v. Shepherd*, 96 Eng. Rep. 525, 527 (K.B. 1773) (Blackstone, J.).

Byrant v. Lefever,⁴⁰ the plaintiff had first emitted fumes from his own manufacture which escaped over the defendant's land into the open air. The defendant then raised the height of his wall which prevented the fumes from escaping and drove them back onto the plaintiff's own land, where they caused damage. If the general rule, do not cast fumes upon your neighbor's land, is settled by analogy to the trespass cases, the issue is whether this situation falls within it. The answer is that it does not, because the increase in the height of the wall is not a physical invasion, so the defendant is safe, even though he raised the wall after the plaintiff began his manufacturing process.⁴¹ The case is one of diversion wherein the plaintiff has simply harmed himself. It is really no different from a situation in which the plaintiff shoots a bullet which bounces off the defendant's wall, and then takes out the plaintiff's own eye on the ricochet. In *Byrant*, the issue left for the court to resolve has nothing to do with the original distribution of property rights. It has everything to do with whether the harm was self-inflicted or not, given the general legal recognition of the standard boundary lines between neighbors. Coase was quite correct to think that causation questions presupposed property rights. But he was wrong to think that general accounts of property rights were not available to answer that question, prior to making factual determinations in individual cases. The boundaries between property are quite sufficient in the ordinary two party case of pollution or trespass.

What happens to the analysis of rights and causation when there are three parties? This issue is raised in the second half of Thomson's paper.⁴² There, she considers the baseline question anew in connection with the distinction between causing harm and not conferring a benefit. Suppose: A threatens to punch B in the nose, and C intervenes to stop the blow. Is this a case where the intervention of C confers a benefit upon B; or a case where, if C does not stop the blow, the nonintervention of C causes a harm to B. Thomson asks, for example:

why should we say

(4) *If we make the injurer refrain, we will prevent the victim's suffering a harm* as opposed to

(5) *If we make the injurer refrain, we will confer a benefit on the victim?*⁴³

40. 4 C.P.D. 172 (1879).

41. The temporal dimension adds yet another wrinkle, for now there are aspects of the "coming to the nuisance doctrine," which when properly understood goes to a mitigation of damages. See *Sturges v. Bridgman*, 11 Ch. D. 852 (1879). For more extensive discussions of my views, see R. EPSTEIN, *supra* note 19, at 119; Epstein, *Nuisance Law: Corrective Justice and its Utilitarian Constraints*, 8 J Legal Stud. 49, 72-73 (1979).

42. Thomson, *supra* note 38, at secs. V and VI.

43. *Id.* at 489 (emphasis in original).

Without clear baselines, this choice between Thomson's (4) and (5) would be quite impossible to make, so the distinction between causing harm and not conferring benefits—or (to use lawyer's language) the distinction between restitution from B to C where C intervened, or of tort damages from C to B in the event that C did not intervene—would become unintelligible.

It is, however, possible to identify the baseline in these three party cases. In the normal case there are no special relationships between A and C. Accordingly, C's nonintervention does not count as causation of harm, lest everyone in the world be responsible for not intervening to protect strangers in distress. As C did not use force or fraud, the original baseline protects his conduct. We can say, therefore, that when C does intervene, he confers a benefit upon A; just as if C had rescued A when he was in peril from some natural event, instead of A being in danger from the attack of B.⁴⁴

By the same token there are many situations in which C is under some duty to A.⁴⁵ In some cases the duty is created by status: C may be the parent or guardian of A. In others C may have some contractual duty to take care of A: C may be a counselor and A may be a camper; C may be a train conductor, and A may be a passenger. In these cases it is often an open question whether the duty of care that is undertaken includes the consequent obligation to protect A against the assaults of third parties like B. We can ignore the factual complications that arise from deciding whether some implied understanding reaches that far, by assuming that there is some express contractual provision that first obligates C to take care of A and which then specifies the level of care that must be taken.

With the special arrangement established, we can approach the question of causation of harm and of not conferring a benefit in a more constructive fashion. If C takes the requisite level of care, but B nonetheless injures A, then we have no causation of harm, only the inability to confer a benefit. If C takes less than the requisite care, when the use of that care level would have enabled him to fend off B's assault, then we have a case of causing harm, because the so-called omission is preceded by a duty assumed by contract or imposed by status, allowing us to speak of a breach of duty. Finally, if C takes more care than he is obligated to in protecting A, then we again have the conferring of a benefit. If more

44. I put aside here the further complication, whether a general duty to rescue strangers in at least some cases is a Pareto superior position to the common law rule. See R. EPSTEIN, *supra* note 19, at 241-42.

45. See generally RESTATEMENT (SECOND) OF TORTS, §§ 315-320 (1979).

care is taken when the specified level of care would have sufficed, then we indeed have a case of unnecessary precautions. Careful attention to the baseline question thus clarifies the underlying structure of legal obligation. It is now possible to decide whether C must compensate A when there is no rescue, or when A might have to compensate C when the rescue was a success.⁴⁶ The theory of property rights and the theory of causation fit together like hand and glove.

V. JOINT CAUSATION

The question of causation, however, properly circumscribed, does not only raise remoteness of damage issues. Some of the most recurrent puzzles of causation arise in the context of joint causation. To be sure, many apparent questions of joint causation are simply eliminated when the property baseline is secure, and causation is limited to the use of force and misrepresentation.⁴⁷ Nonetheless, even though these techniques narrow the types of events that qualify as causes, many genuine cases of joint causation remain. In their simplest form, these questions arise when two or more forces combine together to bring about the invasion of the plaintiff's person or property. The question is how to sort out the priority between two actions, each of which, as a matter of general theory, counts as a proper cause. In general, the problem here is exclusively one of attribution of liability to particular persons. If these two separate forces were both set in motion by the same person, then apportionment of harm between the forces would be of no particular consequence because it leaves the attribution issue unchanged. Both roads would still lead to Rome. Similarly the problem of attribution can be eased when the principle of vicarious liability makes one person liable for the torts of the other—or a third person responsible for the torts of both. The roads would still lead to Rome, (now in the guise of the common employer), even if the journey becomes a bit longer.⁴⁸

Nonetheless, other tort doctrines do not eliminate all joint causation cases. It may be that two separate forces, one attributable to A, and a second to B, work together to cause some harm. If A and B are strangers, then how is the question of causal attribution to be resolved? One initial foray is to try to rank the two causes in, as it were, some lexicographical order. In many cases that surely seems possible. If A blocks

46. "Might" is used because the restitution action will generally not lie where the rescue is intended as a gift of services. RESTATEMENT OF RESTITUTION, § 117 (1937).

47. See *infra* pp. 671-72.

48. See Epstein, *The Temporal Dimension in the Law of Tort*, 53 U. CHI. L. REV. 1175, 1192-97 (1986).

B's right-of-way on the highway, then generally speaking A's causal contribution will dominate B's, so that if both are solvent A bears the full loss.⁴⁹ Similarly, in cases of compulsion, where A (by force) makes B hit C, there is also a clear causal priority, whereby A bears the whole loss when both A and B are solvent.⁵⁰ That same argument applies to the situation where A sets the bomb which B triggers by some innocent act, say turning on a light switch. A's causal action dominates B. Here I believe that it is wrong to claim that B is not causally responsible:⁵¹ after all, B did set off the bomb, so that if he escapes from liability it is not because causation was wanting. It will have to be on some theory of no negligence or no duty.⁵²

But at this point the evasions cease. There are joint causation cases where the two forces are independent and coequal, as where each of two bullets fired by unrelated parties strike the plaintiff at the same time, such that both (or neither) contains sufficient force to cause all (or part) of the plaintiff's harm. While these cases look disarmingly simple, the sad truth is that *no one* has ever come up with an answer that has persuaded his rival theorist of the error of his ways. And I suspect that no one ever will.⁵³ The question of the allocation between joint forces is a bit like the question of joint costs in economics: there is simply no unique allocation of the costs of the animal which is used to produce valuable meat and valuable furs.⁵⁴ Even if we had a precise sense of what the probabilities were of harm, with each action taken alone, and with the two taken jointly, there is no obvious way—here I agree with Kruskal⁵⁵—to combine that information into unique causal judgments.

These coequal joint causation cases are often approached as though

49. Epstein, *Defenses and Subsequent Pleas in a System of Strict Liability*, 3 J. LEGAL STUD. 165, 174-85 (1974). There are of course qualifications, especially for deliberate wrongs.

50. *Id.* at 174-77.

51. For example, Thomson posits that "[I]f unbeknownst to Jones and me, you arranged the wiring in Jones' house and mine so that when I next sneezed a fire would start in Jones' house, then your arranging the wiring caused the fire, but my sneezing did not." Thomson, *supra* note 38, at 473.

52. See, e.g., *Palsgraf v. Long Island R.R.*, 248 N.Y. 339, 162 N.E. 99 (1928), and more clearly *In re Kinsman Transit Company*, 338 F.2d 708 (2d Cir. 1964). "The point of *Palsgraf* was that the appearance of the newspaper-wrapped package gave no notice that its dislodgement could do any harm save to itself and to those nearby, and this by impact, perhaps with consequent breakage, and not by explosion." *Id.* at 721-22. See also *The Nitro-glycerine Case*, 82 U.S. (15 Wall.) 524 (1872).

53. For the latest in the debates see Kaye & Aickin, *A Comment on Causal Apportionment*, 13 J. LEGAL STUD. 191 (1984); Kruskal, *Terms of Reference: Singular Confusion about Multiple Causation*, 15 J. LEGAL STUD. 427 (1986); Rizzo & Arnold, *Causal Apportionment in the Law of Torts: An Economic Theory*, 80 COLUM. L. REV. 1399 (1980); Rizzo & Arnold, *Causal Apportionment: Reply to the Critics*, 15 J. LEGAL STUD. 219 (1986); Wright, *Causation in Tort Law*, 73 CALIF. L. REV. 1735 (1985).

54. See Kruskal, *supra* note 53, at 435 n.9.

55. *Id.*

they were critical from the point of view of incentives. Now the general concern is that it is difficult to make both parties face the full costs of their actions if each knows that the other might bear part of the liability in the event of injury.⁵⁶ Yet even that economic concern is, I suspect, overstated by supporters and detractors of law and economics alike. The question of incentives must be approached *ex ante*, and there the probability is exceedingly slim that either party will find that his actions might involve him in a potential joint causation case. What fraction of shooting cases involve seven bullets, five fired by one defendant and two by the other, where one (two, three, etc.) bullets strike the defendant. To take a guess, joint force issues of this type probably arise in far less than five percent of the cases. If that is the case, then bounded rationality is the order of the day. It is unlikely that *any* plausible allocation rule governing these cases will cause more than minor behavioral modifications, let alone any that deviate from some unknown optimum level of precaution. The key feature about using principles of force and fraud is that they *limit* the types of compensable injury, and the type of causes, for which recovery is allowable. In so doing they effectively reduce the frequency of joint causation cases to manageable levels in the first place.

There is one further class of joint causation cases that require some special attention. Thomson instances as a case of joint causation the situation where some brittle glass is broken by the ordinary blow. If the class of permissible causes is limited to the use of force, this is not a joint causation case at all, for only the defendant has used force. This result is one which is generally achieved by the common law in connection with the chilling maxim, "you take your victim as you find him."⁵⁷

In ordinary English, however, this limited view of causation might be displaced, so that the weak condition of the glass is regarded in some sense as a cause of the injury, at least where glass of ordinary firmness was sufficient to withstand the blow that in fact shattered it. The appeal here is to an idea of increased risk or hazard which might be offered as a replacement for causal language.⁵⁸ Yet on balance I think that the traditional legal answer to that question is more instructive, and, as I shall argue, more complete as well. Here we have a harm, H, which is a function of two conditions, the force, F, and the brittleness, B, that is $H =$

56. See Shavell, *Uncertainty Over Causation and the Determination of Civil Liability*, 28 J.L. & ECON. 587 (1985).

57. See, e.g., *Dulieu v. White & Sons*, [1901] 2 K.B. 669.

58. See Cooter, *Torts as the Union of Liberty and Efficiency: An Essay on Causation*, 63 CHICAGO-KENT L. REV. 523 (1987) (Professor Cooter's article appears in this symposium issue.). He asks the question of whether causal language can survive the advance of scientific knowledge. Thus far its survival power has been quite steady.

$f(F,B)$, such that as F and B increase, so too the likelihood of harm. What should we make of these relationships?

Let us first consider cases in which the plaintiff and the defendant are strangers. Under the thin-skull rule, the brittleness drops out of the legal calculation so that the harm now becomes: $H = f(F)$. All loss is attributable to the outside agency. This rule has the great convenience of simplifying a joint causation case into one of singular causation. But it then raises anew the Coasean question: what if the original owner of the glass was the cheaper cost-avoider of the loss. Here the critical inquiry is, how often is that likely to be the case. To see the problem, assume that H occurs only if force and brittleness are conjoined in any situation, so long as they exceed some fixed threshold, T . For example,

$$H = aF + bB > T.^{59}$$

The critical question is what do we expect the properties of this simple equation to be. At one level the sense is that the force will be the more important cause in most cases than the brittleness: 'a' therefore will be larger than 'b'. Indeed it seems quite likely that there will be many cases in which $aF > T$. In these situations little is lost if we ignore the B term in its entirety. Who would care about the thin-skull rule for example in an airplane crash? Similarly, who would care about the thickness of glass struck by a baseball bat? On the other hand there are doubtless some cases in which F is very small, and B is simply huge: The imaginary case where the sensitive plaintiff falls into a hopeless stupor when the defendant waves his little finger from across the street is one such illustration.⁶⁰ Yet it is very unlikely that any plaintiff so afflicted could ever survive at all in a hurly-burly world, so that the probability of this occurrence is quite small indeed—so small that there is very little inducement to enlarge the class of causes to include sensitivity as well as force. The case closer to the line is *Vosburg v. Putney*,⁶¹ where the soft kick to the inflamed spot above the knee was enough (although the causal point was disputed on the facts). There, the court again disregarded the extrasensitivity, in part because of the deliberate nature of the touching, which took place in a classroom situation where the kick was against class rules. Taking the point, therefore, at its limit, the case for retaining the thin-skull rule asks: why complicate the analysis when there are very few cases where brittleness or sensitivity matter, at least between stran-

59. I used a similar additive model for exposition. It might be that a multiplicative model is better, or $H = F \cdot B^b > T$. For these purposes the differences between models does not matter much.

60. Epstein, *supra* note 49, at 172, 189 n.65.

61. 80 Wis. 523, 50 N.W. 403 (1891).

gers? The simpler rule looks only at force. The force applied has a very high level of accuracy that makes it attractive except in those extreme hypothetical cases where some de minimis rule could be invoked. The categorical rule is subject to its counterexample, but the cases in which any exception is decisive tend to be small.

VI. CAUSATION, CONTRACT, AND BEYOND

The extrasensitivity case invites consideration of issues that go beyond matters of joint causation. In particular it is possible to identify important institutional situations, where relying solely on the tests of causation based upon force creates serious social losses. Return again to Thomson's illustration of the brittle glass, and add but one fact: assume that the relationship between the glass owner and the blow striker is consensual. Here the most obvious variation is one where the owner of the glass (or diamond) gives it to a jeweler for repair. Normally the rule, you strike the blow, you cause the loss, would apply. But what jeweler would agree to work in this case where the risk of shattering is so great because the jewel's imperfection has already been identified. Now the common law rule imposes serious costs, so we should expect, as is the case, that the extrasensitive nature of the product induces the parties to reallocate the risk of loss back to the owner by contract, usually an express contract: jewelers need be burnt only one time to protect themselves. Where it is not, the law, subject to contract, may sensibly reverse the rule for strangers and imply the term that the owner gives the flawed glass for repair at his own risk.

Nor are the parties forced to choose an all-or-nothing rule. The owner's assumption of risk need not be absolute. Surely there is no excusing the jeweler for the (infrequent) wrong of deliberately breaking the glass. And some cases of reckless or negligent harm may be covered as well, again by agreement. It thus becomes quite easy for the system of liability to move beyond the billiard ball type examples with which causal discussions always begin.

Assumption of risk is therefore a *central* limitation on the role of causation in general tort theory. My own views of causation have been described by Hart and Honoré as "causal maximalism,"⁶² a theme Kel-

62. See H.L.A. HART & T. HONORÉ, *CAUSATION IN THE LAW* at lxxiii-lxxvii (2d ed. 1985). One criticism that they make of me is worthy of some brief response. Following Posner, *The Concept of Corrective Justice in Recent Theories of Tort Law*, 10 J. LEGAL STUD. 187, 193-94 (1981), they note that my theories of strict liability ignore that the defendant has to do some *wrong* before

man has also emphasized in his contribution to this volume.⁶³ But the causal maximalism label is misapplied. In the sequel to the original *A Theory of Strict Liability* paper, I dwelled at great length on the assumption of risk defense which is part and parcel of any complete system of responsibility.⁶⁴ The emphasis upon causation is critical for liability among strangers, but it does not carry over unchanged to the many cases of harm between persons who have some consensual arrangement, express or implied between them. With the growth of medical malpractice and product liability law,⁶⁵ the class of stranger cases shrinks relative to the class of consensual cases precisely because so many plaintiffs run the risk of suffering some kind of loss in their pursuit of some greater gain.

The relationship between tort and contract is critical to understanding not only particular cases, but also the way principles of causation tie into the general theory of political responsibility. Kelman makes much of the observation that the difficulties in working causal theory result in "devastating" blows to both libertarian and efficiency accounts of the law.⁶⁶ He is quite correct to point out the great difficulties that necessarily arise when one attempts to apply ordinary tort notions to the very complex settings that modern tort litigation seeks to control. The heavy burdens in figuring out "what might have been" are sufficiently trouble-

liability is properly imposed, so that the theory may be highly restrictive of all human endeavor. I think that this criticism is mistaken on two counts.

First, the system of defenses (e.g. causal defenses and assumption of risk) does place very strong limitations upon liability, and works to reduce the gap between the causation of harm to someone else's person and property and the legal responsibility for it.

Second, it is incorrect to say that the principles of strict liability should be limited, as they suggest, only to cases of "dangerous activities," such as storing explosives. This may be the case where the expected loss is the greatest, so that precautions are most likely to be taken. But in the case of activities not dangerous, it is hard to see why, to use Hart and Honoré's words, that strict liability "would rightly be resented as unduly inhibitive." *Id.* at lxxvi. Certainly other persons would like the greater protection of the rule. And even for the potential tortfeasor, if there is but a low probability of harm, then the needed precautions, or insurance costs should be low as well. The key difference is that where activities are dangerous, then the tort damage remedy *ex post* may be insufficient, especially if the defendant is insolvent. The legal system must then think of private injunctions, or public regulations, or both, to stop consequences that would be an admitted wrong, if it occurred. I discuss some of these points in Epstein, *Nuisance Law: Corrective Justice and its Utilitarian Constraints*, 8 J. LEGAL STUD. 49, 98-102 (1979). See also Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. LEGAL STUD. 357 (1984).

63. Kelman, *supra* note 4.

64. Epstein, *Defenses and Subsequent Pleas in a Theory of Strict Liability*, 3 J. LEGAL STUD. 165, 185-201 (1974).

65. In medical malpractice, see Epstein, *Medical Malpractice: A Case for Contract*, [1976] AM. B. FOUND. RES. J. 87. In products liability, R. EPSTEIN, *MODERN PRODUCT LIABILITY LAW* (1980), and Epstein, *Product Liability as an Insurance Market*, 14 J. LEGAL STUD. 645 (1985).

66. See, e.g., King, *Causation, Valuation, and Chance in Personal Injury Torts Involving Preexisting Conditions and Future Consequences*, 90 YALE L.J. 1353 (1981); Landes & Posner, *Tort Law as a Regulatory Regime for Catastrophic Personal Injuries*, 13 J. LEGAL STUD. 417 (1984); Robinson, *Probabilistic Causation and Compensation for Tortious Risk*, 14 J. LEGAL STUD. 779 (1985).

some in so many product liability and medical malpractice cases to daunt the most ardent causal theorist who has enough sense to recognize that causal theories raise questions of fact, but do not answer them. Kelman is far from the first author to have pointed these problems out. Indeed, the issue has been stressed time and again by persons (including many in law and economics) who work in the traditional libertarian and utilitarian framework, in papers that he cites frequently throughout his own paper.

What Kelman fails to understand is that there are ways in which these problems can be countered, especially where contract solutions are available. Once the parties to a consensual arrangement are aware of the endless pitfalls of handling causation on a case by case basis, they can contract out of the causation questions.

The jeweler's example is one such case, and indeed the general rule in such cases, dating from Roman times, is that the owner of a flawed jewel takes the risk of loss, at least where the jeweler has worked on it with reasonable care.⁶⁷ Importantly, express disclaimers of loss for these jewels are as common in the trade today as they were in Roman times. Similarly, with physical injuries of the sort litigated in *Vosburg v. Putney*,⁶⁸ the sensible solution may well be for the school to require doctor's letters and specified precautions before letting small children return to class, and this is surely done in an informal but effective way in many nursery schools and kindergartens. Explicit contractual solutions also have their place on construction sites, where the risk of being struck by a falling brick is apparent to all workers: a thick skull offers scant protection against serious injury. Rather than trying to sort out Thomson's joint causation problems *ex post*, the entire problem is avoided at low cost by requiring all workers and visitors to wear helmets on construction sites. Now the joint causation problem is not solved, but neatly avoided. Wearing the helmets reduces the frequency of injuries, and for

67. Thus, the text reads:

If you give a cup to a jeweler to be filigreed, he will be liable for wrongful damage if he breaks it through lack of skill, but if he broke it not from lack of skill but because it had cracks which made it unsuitable, he may be excused; and so workmen usually contract, when things of this kind are entrusted to them, that they shall not do it at their own risk, and this takes away any right of action on the contract of letting and hiring or under the *lex Aquilia*.

DIG. 9.2.27 (Ulpian, Ad Edictum 18). The *lex Aquilia* was the general Roman statute governing liability for damage to property and person. The translation is from F.H. LAWSON, NEGLIGENCE IN THE CIVIL LAW 109 (1950). For a parallel passage governing the setting of gems, see DIG. 19.2.13.5.

68. 80 Wis. 523, 50 N.W. 403 (1891).

those which do occur, it eliminates the joint causation puzzles, not by philosophical maneuvers, but by advance planning.

The contractual responses can take other forms as well. The original workers' compensation systems were, it bears saying again, introduced first by contract and not by statute, and one explicit motivation for them was to eliminate the problems of proof that arose under the common law principles that they displaced.⁶⁹ The popular description of the system as an "omnibus settlement" of all tort actions before they occur, is not only a deft advertising technique for the modern statutory schemes, but a very accurate account of the prior market development. This solution can also be replicated in other areas. Does anyone really think that medical malpractice cases would be handled in the same fashion if contracting out were permitted? Or products liability cases? Some of the most vexing questions of causation arise in the drug cases where plaintiffs and defendants routinely place into evidence a vast array of *in vivo*, *in vitro*, epidemiological, chemical evidence as to what drug causes what condition. The Bendectin cases⁷⁰ show to a "T" that some courts will allow this welter of evidence to go to a jury while others will not. It shows the enormous disagreement of what to make of it when it is introduced. One great vice of the modern tort law is that its refusal to allow contracting out places far greater stress on these causal issues than the system can bear. It is hardly a condemnation of markets that they cannot answer, cheaply and accurately, the causation questions that they rationally would try to avoid.

To be sure, there are still the stranger cases where the contract solutions will not work because the transactional barriers are too high. In these situations case-by-case proof of causation may be far too difficult, so some form of regulation might be justified to reduce the incidence of harm, or to make it possible to identify the culprits once the harm has occurred. The reason we have stop signs and traffic lights is that they both reduce accidents in the first instance, and they reduce the number of joint causation cases in accidents which do occur. (Those who conform to the rules of the road are safe. The state thus acts as an intermediary which converts strangers into contracting parties.) The construction site

69. Epstein, *The Historical Origins and Economic Structure of Workers' Compensation Law*, 16 GA. L. REV. 775, 797-98 (1982).

70. *Lynch v. Merrell-National Laboratories Div. of Richardson-Merrell, Inc.*, 646 F. Supp. 856 (D. Mass. 1986) (keeping case from jury); *In re Richardson-Merrell, Inc. "Bendectin" Products Liability Litigation*, 624 F. Supp. 1212 (S.D. Ohio 1985) (jury verdict for defendant); *Oxendine v. Merrell Dow Pharmaceuticals, Inc.*, 506 A.2d 1100 (D.C. 1986) (allowing case to go to jury). In all cases the plaintiff relied on "(a) structure-activity information, (b) *in vivo* studies, (c) *in vitro* studies, and (d) epidemiological studies." *Oxendine*, 506 A.2d at 1104.

referred to above might pose risks to strangers. Rather than litigate the question of who dropped what from where, it is perfectly sensible to require a scaffolding that offers protection to the people walking on the public streets below. Again a sensible investment in robust institutional arrangements avoids ticklish joint causation questions. Everyone who has thought hard about pollution that arises from many sources at the same time, for example, automobile emission, despairs at the thought of an endless set of tort actions brought by everyone against everyone. Some direct control is appropriate to reduce the level of emissions in the first place; and a system of fines is an appropriate replacement for damages for the few offenders that escape the original regulatory network.

The culprit in these areas is not the libertarian or economic theories. The theories did not create the factual problems of the modern asbestos, delayed trauma toxic tort case. Rather the difficulty arises because the present legal system is so wedded to its own conceptions of causation and responsibility that it does not permit any form of contracting out, even where it is feasible. Difficulties also arise because of the legal system's present hostility to clear bright line tests where contracting is not feasible.

Lest one think that Kelman's own largely unknowable, legal system will be able to escape the difficulties that he sets out in great detail, it is only necessary to look once again at the last section of his paper. Where he sets out, in the most general terms possible, the program which his emancipated regulators will use to resolve the intractable issues of causation in his very expansive regulatory state. There is no specific program, save a plea to adopt a general "social welfare function," that takes into account the error costs associated with the over and underestimation of the risk. Yet there are no institutional safeguards against regulation running amok, for Kelman writes as if the public choice literature never exists. He speaks of the single regulator and endows her with a degree of virtue, competence, and foresight that we all lack. He does not take into account the ravages of interest group politics and special pleading. And he is willing to allow the regulatory process to introduce "distributive judgments,"⁷¹ which are better handled through the tax system.⁷² Yet with all this openness in the system he thinks that he will be able to advance the public welfare. In so doing he ignores one of the great advantages of fixed rules of liability, such as those which turn on observable quantities like physical invasion. They reduce the degree of government

71. Kelman, *supra* note 4, at 635.

72. See A.M. POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 112 (1983).

discretion, and hence act as an indirect constraint against the possibility of government abuse.

In the end, the irony is irresistible. At every point Kelman attacks the conventional wisdom with respect to causation and regulation. But he has no place to hide. The difficulties that utilitarians and libertarians alike address are not questions of their own making. They are questions forced upon us all by the basic laws of physics and chemistry, and the uncertainties of human knowledge. The central program that emerges is one that seeks to minimize the sum of the costs of error in both directions, a program that is both over and underinclusive, and a program that seeks to minimize the administrative costs associated with working the system. Yet even when these costs are minimized they can still be very large. What is needed is not Kelman's general counsel of despair but some particular insight as to how regulation can be improved. To take but one recent example, Nichols and Zeckhauser attack the dominant way in which risk is assessed in routine environmental proceedings.⁷³ In the name of prudence, the regulators frequently base all their assessments upon the worst case possibilities. Yet this cautious approach turns out to have systematically inferior allocative consequences than a simpler expected value approach. The worst case analysis systemically overvalues very low probability estimates of extreme cases, and hence will divert government resources from alternative hazards with greater risks, about which no extreme tale can be told. There is nothing in Kelman's nostrums which explains how to avoid this problem.

Every system of law has to recognize some baseline of property rights in order for it to make its collective judgments of right and wrong. No one believes that "[l]iberal theory is grounded in the dream that a fully just and efficient state can be attained without the exercise of collective judgment."⁷⁴ Everyone—even me⁷⁵—knows that these collective judgments are required, but must also be constrained. "Liberal theory" does not call for the abolition of tort law, or rule injunctive relief out as a

73. Nichols & Zeckhauser, *The Perils of Prudence*, REGULATION, Nov.-Dec. 1986, at 13.

74. Kelman, *supra* note 4, at 636.

75. My position was stated as follows:

The purpose of the system is to establish with reasonable certainty the boundaries in which individual decisions can take place free of public intervention and control. The point is not that there are only individual decisions under this second regime and only collective decisions under the first [in which the state makes "most of the major decisions about the allocation of resources through its central public agencies"]. Rather, it is that collective decisions under the second regime are designed to parcel out the available terrain, such that a second tier of individual decisions and voluntary exchanges can then determine the distribution of goods and services within society.

Epstein, *The Static Conception of the Common Law*, 9 J. LEGAL STUD. 253, 254-55 (1980).

matter of course. Indeed, because every system must make some collective judgment, the law must have some theory of causation to link consequences with antecedents, within a framework of rights. These problems beset the socialist state as much as it does the liberal one. It is for just that reason that matters of causation and rights will remain at the top of our intellectual agenda in the years to come.

THE KENNETH M. PIPER LECTURE

THE KENNETH M. PIPER LECTURESHIP SERIES

The Kenneth M. Piper Lectureship Series is dedicated to the memory of Mr. Kenneth M. Piper, who contributed much to the fields of personnel management and labor relations during more than two decades of service with Motorola, Inc. and Bausch & Lomb, Inc.

This year's Piper Series featured a lecture by Mark A. Rothstein, Professor and Director of the Health Law Institute, University of Houston, who spoke on Drug Testing and The Workplace. Commentary on Professor Rothstein's lecture was provided by Tia Schneider Denenberg, Arbitrator and holder of the American Arbitration Association J. Noble Braden Chair for the Development of Labor Arbitration, Alan C. Page, Special Assistant Attorney General for the State of Minnesota and former National Football League Players' Association player representative, and J. Patrick Sanders, Vice President for Industrial Relations, Commonwealth Edison.

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